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OU#1 ARARS U.S. DOE - FERNALD OH6 890 008 976

01/03/91



UNITED STATES ENVIRONMENTAL FREGION 5 230 SOUTH DEARBORN ST. CHICAGO, ILLINOIS 60604



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JAN 0 3 1991

REPLY TO ATTENTION OF:

Mr. Andrew P. Avel United States Department of Energy Feed Materials Production Center P.O. Box 398705 Cincinnati, Ohio 45239-8705 5HR-12

RE: OU#1 ARARS

U.S. DOE - Fernald OH6 890 008 976

Dear Mr. Avel:

On December 3, 1990, the United States Department of Energy submitted a list of potential Applicable or Relevant and Appropriate Requirements (ARARs) for Operable Unit (OU) #1. The United States Environmental Protection Agency (U.S. EPA) has reviewed the list of ARARs, which includes To Be Considered requirements (TBCs), and has the following comments:

- The list of ARARS will need to be revised to consider any new "hybrid" alternatives that U.S. DOE proposed in the revised Initial Screening of Alternatives (ISA) report.
- Compliance with ARARS is required during both the design and implementation of the remedial action, as well as the completion of the remedial action (40 CFR 300.435(b)(2). This policy does not apply to chemical-specific ARARS (55 Fed Reg 8755).
- 3. Post-closure requirements of 40 CFR 264.117 (page 54 of 83) are also applicable to Alternatives 4 and 5.
- 4. It is not clear why the ARARs presented in 40 CFR 264, Subparts J, K, and L (Page 57 of 83) are listed for Alternatives 1 through 5. None of these alternatives were described in the ISA report as involving the use of tanks, surface impoundment, or waste piles.
- 5. The requirements of 40 CFR 264.301 (Page 58 of 83) should be considered an ARAR for Alternative 5 because an off-site landfill must comply with these requirements.
- 6. The requirements of 10 CFR 61 Subpart D (Page 74 of 83) should be considered an ARAR for Alternative 5 because the off-site landfill must comply with these requirements.

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- 7. If the risk associated with an alternative is greater than 10E-4, MCLGs are ARARs along with MCLs.
- 8. There needs to be a general explanation why ARARs are applicable or relevant and appropriate and why specific TBCs are necessary.
- 9. The list of proposed RCRA ARARs must be reviewed with respect to applicable guidance regarding the definition of ARARs. U.S. DOE must distinguish between substantive requirements that must be complied with and administrative requirements that are not ARARs. For example, administrative requirements include documentation, reporting, record-keeping, etc. To the extent that cited RCRA provisions are administrative provisions, they should be deleted.
- 10. TBCs are only used where there is not an ARAR or where the existing ARARs are not protective. The TBCs listed must be reviewed in light of this standard.
- 11. The asbestos NESHAP requirement should be listed as relevant and appropriate.
- 12. The Ohio Administrative Code (OAC) should be cited, not the Code of Federal Regulations, where applicable (for portions of the program for which Ohio is authorized). The CFR citation may be added for reference only, but this should be clarified.
- 13. U.S. DOE's Draft Regulatory Guide for Radiological Effluent Monitoring/Environmental Surveillance should be included as a TBC. This document was formerly known as U.S. DOE Order 5400.xy.
- 14. The use of 10 CFR 61 as an ARAR is not applicable or relevant and appropriate for the following reasons:
 - A. 10 CFR 61.1(b)(2) states that these regulations do not apply to byproduct material to which the regulations at 10 CFR 40 (Appendix A) do apply:
 - "The regulations in this part do not apply to (2) disposal of uranium or thorium tailings or wastes (byproduct materials as defined in 40.4(a-1)) as provided for in Part 40 of this chapter in quantities of greater than 10,000 kilograms and containing more than fie (5) millicuries of radium-226."
 - B. Total mass of material and total radium-226 quantities exceed values specified at 10 CFR 61.1(b)(2) for all the waste pits.

- C. The degree of health hazards and containment requirements of this material are identical to those of uranium/ thorium mill tailings. 10 CFR Part 61 offers no explicit means of classifying these wastes as either Class A, B, C, or greater than C low level radioactive wastes, since 10 CFR 61.55 Table 1 does not contain radium, uranium, or thorium, and since 10 CFR Part 40 applies to this type of material.
- D. The requirements for the most restrictive waste category in Part 61 (Class C- intruder barrier must function for 500 years) are not as stringent as those at 10 CFR Part 40 Appendix A or at 40 CFR 192 (containment of radioactive materials for 1000 years) which are specifically designed to address the hazard associated with intermediate concentrations of long-lived alpha emitters.
- E. There are no groundwater protection or containment requirements in 10 CFR Part 61.

U.S. DOE must submit a revised list of ARARs within thirty (30) days of the date of this letter. In accordance with the 1990 Consent Agreement, this revision must address all of the above deficiencies. Of course, refinements of the list of potential ARARs will most likely occur later in the remedial process.

Please contact me at (312/FTS) 886-4436, if you have any questions.

Sincerely,

Catherine A. McCord Remedial Project Manger

Attachment

cc: Richard Shank, OEPA
Graham Mitchell, OEPA-SWDO
Leo Duffy, U.S. DOE - HDQ
Joe LaGrone, U.S. DOE - ORO